

Lesson: Create a Food Chain



Introduction to the Lesson/Activity

Create a Food Chain - To help students understand that almost all kinds of animals' food can be traced back to plants and that the

sun is often the ultimate source of energy needed for all organisms to stay alive and grow. Lesson for Grades 1 - 12

Objectives

Students will:

- 1. construct a simple food chain
- 2. explain the effects to the food chain when one or several species are removed.

Materials

Paper Pencil Pictures of plants and animals

Activity

- Define ecotone- the transition zone between two different plant communities, as that between forest and prairie.
- 2. Begin the lesson with the question: "What did you eat for dinner last night?" Break responses down into individual ingredients (separate lasagna into pasta, beef, tomatoes, and cheese) and write them on the board.
- 3. Once you have a broad sampling, begin categorizing the ingredients into producers, and consumers. Use questions such as: Which of these foods come from plants? Which of these foods don't come from plants? (If mushrooms are on the board, remember that technically mushrooms are fungi not plants!)
- 4. At this point, introduce the idea of producers as plants, or more scientifically, as organisms that make their own food through photosynthesis. Introduce the idea of consumers as animals, or more scientifically, as organisms that eat producers or other consumers.
- 5. Break down the consumer category further into herbivore, carnivore, omnivore, and decomposer. Use questions such as: Of the consumers, which are animals that eat plants? Which are animals that eat other animals? Which eat both? Are there any decomposers? (Mushrooms, crab, shrimp, and lobster are likely to be the only decomposers.) herbivore, carnivore, omnivore, and decomposer at this point and give the formal definitions.
- 6. Ask students to describe a food chain. As part of this discussion, try to follow one or more of the foods on the board through the food chain. For example, sun -> corn -> cow -> people. All the food chains we will be dealing with in this class have the sun as the initial energy source although you may want to briefly mention the existence of other food chains that do not depend on the sun.
- 7. Discuss with class what the effects to the food chain are when one or several species are removed.

Key Vocabulary

Ecotone, Prairie, Grassland, Forest, Diversity, Community, Food Chain, Herbivore,

Carnivore, Omnivore, and Decomposer

Essential Questions

What happens to your role or responsibility in perseveration of a habitat?

What are an ecotone, herbivore, carnivore, omnivore, and decomposer?

Oklahoma Pass Standards

Grade 1-3

Science Process Standard 2 &

Process Standard 4

Grade 4-8

Science Process Standard 1 &

Process Standard 3 **Kindergarten**

Modes and Forms of Writing:

Standard 2

Research and Information Standard 8 Oral

 $Language/Listening\ and\ Speaking: Standard\ {\bf 1,}$

Standard 2, & Standard 3

Grade 1 – Life Science - Standard 2 Grade 2- Life Science - Standard 2 Grade 3 - Life Science - Standard 2 Grade 4 - Life Science - Standard 4 Grade 5 - Life Science - Standard 2 Grade 6 - Life Science - Standard 4

Grade 7 – Life Science - Standard 2 Grade 8 – Life Science - Standard 3 High School – Environmental Science -

Standard 2 & Standard 3

Science Process Standard 1

Other Suggested Activities

Food Web

Endanger or Threatened Species Activities

Recycling – Earth Day

Plants or Tree Identification Leaf Rubbing